



**UNITED STATES DEPARTMENT OF COMMERCE**  
**Patent and Trademark Office**

Address: COMMISSIONER OF PATENTS AND TRADEMARKS  
Washington, D.C. 20231

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. |
|-----------------|-------------|----------------------|---------------------|
| 08/936,182      | 09/24/97    | KITAGISHI            | N 1232-4046US1      |

CHRISTOPHER E. CHALSEN  
MORGAN & FINNEGAN  
345 PARK AVENUE  
NEW YORK NY 10154

MM42/0201

EXAMINER

SHAFFER, R

ART UNIT

PAPER NUMBER

2872

DATE MAILED: 02/01/00

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

# Office Action Summary

Application No.

08/936,182

Applicant(s)

KITAGISHI

Examiner

R.D. SHAFER

Group Art Unit

2872

—The MAILING DATE of this communication appears on the cover sheet beneath the correspondence address—

## Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTHS MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, such period shall, by default, expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).

## Status

- ☒ Responsive to communication(s) filed on 10/26/99
- ☒ This action is **FINAL**.
- ☐ Since this application is in condition for allowance except for formal matters, **prosecution as to the merits is closed** in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11; 453 O.G. 213.

## Disposition of Claims

- ☒ Claim(s) 36-105 is/are pending in the application.
- Of the above claim(s) 57-70 AND 92-105 is/are withdrawn from consideration.
- ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- ☒ Claim(s) 36-56 AND 71-90 is/are rejected.
- ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- ☐ Claim(s) \_\_\_\_\_ are subject to restriction or election requirement.

## Application Papers

- ☐ See the attached Notice of Draftsperson's Patent Drawing Review, PTO-948.
- ☐ The proposed drawing correction, filed on \_\_\_\_\_ is ☐ approved ☐ disapproved.
- ☐ The drawing(s) filed on \_\_\_\_\_ is/are objected to by the Examiner.
- ☐ The specification is objected to by the Examiner.
- ☐ The oath or declaration is objected to by the Examiner.

## Priority under 35 U.S.C. § 119 (a)-(d)

- ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d).
  - ☐ All ☐ Some\* ☐ None of the CERTIFIED copies of the priority documents have been received.
  - ☐ received in Application No. (Series Code/Serial Number) \_\_\_\_\_.
  - ☐ received in this national stage application from the International Bureau (PCT Rule 1.7.2(a)).

\*Certified copies not received: \_\_\_\_\_

## Attachment(s)

- ☐ Information Disclosure Statement(s), PTO-1449, Paper No(s). \_\_\_\_\_
- ☐ Interview Summary, PTO-413
- ☐ Notice of Reference(s) Cited, PTO-892
- ☐ Notice of Informal Patent Application, PTO-152
- ☐ Notice of Draftsperson's Patent Drawing Review, PTO-948
- ☐ Other \_\_\_\_\_

Office Action Summary

Art Unit: 2872

1. Claims 36-56 and 71-91 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 36, line 3 and claim 43, line 2, "said substrate" lacks proper antecedent basis.

In claim 71, line 2, the use of the language "a half wavelength plate" is vague, indefinite and/or confusing. Note claim 36, line 8.

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 36 and 50 are rejected under 35 U.S.C. 102(b) as being anticipated by Geffcken et al.

Geffcken et al discloses an optical device comprising a transparent plate (55) having a polarizing beam splitting surface (43') formed on one surface and a reflection surface (54') formed on the other surface and a half-wave plate (45"). Note Fig. 5.

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 2872

Claims 37-42 and 51-56 are rejected under 35 U.S.C. 103(a) as being unpatentable over Geffcken et al.

Geffcken et al discloses all of the subject matter claimed, note the above explanation, except for a lens array in combination with the embodiment depicted by Fig. 5.

However, in figures 2 and 3 of Geffcken et al, Geffcken et al clearly teaches it is well known to use cylindrical lens array or a fly eye lens in the same field of endeavor for the purpose of making a plurality of light beams incident on an optical device.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the optical device of Geffcken et al, depicted by Fig. 5, to include a lens array shown in figures 2 and 3 in order to obtain a plurality of input/output beams.

As to the limitations of claims 39-42 and 53-56, it is well known to use an image generator in the same field of endeavor for the purpose of modulating polarized light.

Therefore, it would have been obvious and/or within the level of one of ordinary skill in the art at the time the invention was made to modify the optical device of Geffcken et al to include an image generator as is well known in the art in order to generate input and/or output polarized light beams.

4. Claims 43-49 and 71-91 would be allowable if rewritten to overcome the rejection(s) under 35 U.S.C. 112 set forth in this Office action and to include all of the limitations of the base claim and any intervening claims.

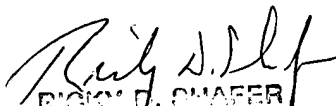
Art Unit: 2872

5. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

6. Any inquiry concerning this communication should be directed to R.D. Shafer at telephone number (703) 308-4813.

Shafer/dc  
January 28, 2000

  
RICHARD D. SHAFER  
PATENT EXAMINER  
ART UNIT 2872